

### REMARKS/ARGUMENTS

Claims 43-53 are active. These claims track prior claims 30-33. Independent claim 43 covers a process of “defecation and filtration” as defined on lines 16-18 of page 13 of the specification<sup>1</sup> and is consistent with the limitations in original claim 30. Support is also found for these claims as follows: Claim 43 (claim 30, page 12, second to last line, page 13, line 1, page 12, lines 16-18 *ff.*), claim 44 (claims 30 and 32, page 24, last line *ff.*), claim 45 (claim 30, page 25, last paragraph), claim 46 (claim 30, page 24, lines 6-10), claim 47 (claims 30 and 34, page 24, line 9), claims 48-49 (claim 34, page 5, lines 3, 13-15, page 31, last paragraph), claims 50-51 (pages 10-11, [0026]), and claims 52-53 (claim 30, page 31).

The specification has been amended to correct various typographical errors or for clarity. Support for these changes is apparent from the context of the error or from general technical knowledge as of the filing date as evidenced by the attached publications. Specific support for interchanging the terms “inside” and “outside” in the paragraph starting on page 44, line 5, is found in the attached PALL KK publications, see e.g., (2) English translation which indicates “Mother liquor. . .is filtered from outside towards inside”. For pages 48 and 50, the culture inoculum of “1% preculture broth” is disclosed on page 49, line 6. Accordingly, the Applicants do not believe that any new matter has been introduced.

### Restriction/Election

The Applicants previously elected with traverse **Group VI**, claims 30-33, directed to a process for purifying DFA III solution. Claims 1, 4-6, 13-26, 29 and 35-42 have been withdrawn from consideration. The requirement has been made FINAL. The Applicants respectfully request that the claims of the nonelected groups which depend from or otherwise

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<sup>1</sup> “Defecation and filtration means treatment of the DFA III crude solution with active carbon and subsequent solid-liquid separation”.

include all the limitations of an allowed elected claim, be rejoined upon an indication of allowability for the elected claim, see MPEP 821.04.

#### Objections—Drawings, Specification

The drawings were objected to for the use of the word “firm”. The Applicants traverse this rejection since the term “firm” appropriately refers to the company providing the material described in the drawings. See e.g., paragraphs [0120-0124] of the published application:

[0120] In each chromatogram, the peak value is compared by the elution time. Each peak becomes high in order of the polymerization (molecular weight) according to the progress of retention time.

[0121] (Product of Firm C): There are about 40 peaks in the elution time between about 6.5 min and about 40 min. Most of the peaks occur in the elution time between 6.5 min and 14.5 min, indicating that the product is rich in polysaccharides of low polymerization.

[0122] (Product of Firm D): There were about 40 peaks in the elution time between about 14.5 min and about 46 min. This indicates that the product is rich in polysaccharides of relatively high polymerization.

[0123] (Product of Firm B): There were about 30 peaks in the elution time between about 7.9 min and about 30 min. Most of the peaks occur in the elution time of 14.5 min or more, but there is some peaks at less than 14.5 min, showing the presence of polysaccharides.

[0124] (Product of Firm A): There were about 40 peaks in the elution time between about 9 min and about 41 min. The shape of the peaks showed the same trend as that of Firm D, but a few peaks were found slightly in the elution time between 6.5 min and 14.5 min.

Accordingly, these objections should be withdrawn.

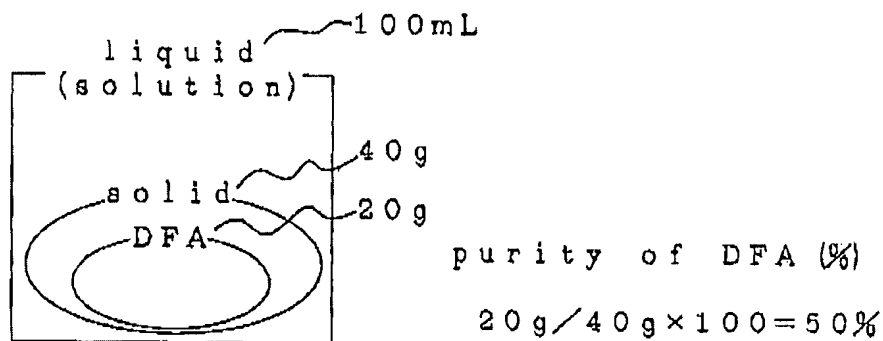
#### Rejection—35 U.S.C. §112, second paragraph

Claims 30-33 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. This rejection is moot in view of the amendments above. As described, for

example, by paragraph [0082] of the published application, it is clear from the disclosure that the term “%” in claim 30 is “w/w%:

[0082] According to the invention, even a less pure DFA III solution can be purified by at least one operation, i.e., chromatography, treatment with yeast or defecation and filtration, to yield a pure DFA III solution efficiently on an industrial scale. The resulting pure DFA III solution can widely be applied to a variety of uses. According to the invention, a DFA III containing solution can be purified at a level as high as it can be crystallized immediately. Thus, it is possible to produce highly pure crystals of DFA III of which purity is **95 w/w %** or more, crushed crystals, or granular crystals, which can widely be utilized in various uses such as drugs or supplement.

A diagram illustrating purity is provided below for the convenience of the Examiner:



This definition of purity is also accepted by those of skill in the art as evidenced by the attached entry for “1866 Purity” from Elsevier’s Sugar Dictionary, page 143. Thus, this rejection may now be withdrawn.

Rejection—35 U.S.C. §102(b)

Claims 30-33 were rejected under 35 U.S.C. 102(b) as being anticipated by Tomita, JP 03-259090 (English abstract, “N”) or by Tanaka, JP 49-117688 (English abstract, “AP”). This rejection is moot in view of the cancellation of the prior claims and would not apply to the present claims since the cited art does not disclose purifying a DFA III solution having a

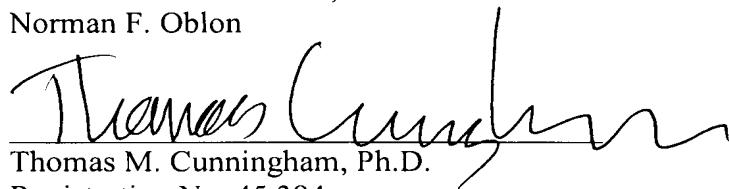
purity of less than 70 w/w% and the other characteristics (Brix, DFA III content) using the steps required by the new claims.

Conclusion

In view of the amendments and remarks above, the Applicants respectfully submit that this application is now in condition for allowance. An early notice to that effect is earnestly solicited.

Respectfully submitted,

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